

## **CLAIMS**

What is claimed is:

1. A method for packaging a web application, comprising:
  - receiving a first web application module and a second web application module, the first and seconds modules each comprising a plurality of resources, each resource comprising information;
  - identifying:
    - those resources of the first module which are related to a corresponding resource in the second module;
    - those resources of the first module which are independent of resources in the second module; and
  - merging each set of corresponding related resources.
2. The method of claim 1, wherein merging a set of related resources comprises determining if information in a resource in the first module conflicts with information in the corresponding resource in the second module.
3. The method of claim 2, wherein, if information in a resource in the first module does not conflict with information in the corresponding resource in the second module, merging the resources comprises:
  - merging the information of the resource in the second module with the information of the corresponding resource in the first module to create a merged resource; and
  - packaging the merged resource into a web application file.
4. The method of claim 3, further comprising packaging the independent resources into the web application file.

5. The method of claim 2, wherein, if information in a resource in the first module conflicts with information in the corresponding resource in the second module, merging the resources comprises indicating to a user of the duplication.
6. The method of claim 2, wherein, if information in a resource in the first module conflicts with information in the corresponding resource in the second module, merging the resources comprises aborting merging of the resources.
7. The method of claim 2, wherein, if information in a resource in the first module conflicts with information in the corresponding resource in the second module, merging the resources comprises:
  - removing the information in the resource of the first module; and
  - continuing merging the resources.
8. The method of claim 1, wherein the first and second modules are WAR files.
9. The method of claim 8, wherein the web application file is a J2EE archive file.
10. A web application development tool, comprising:
  - a first web application module comprising a plurality of first resources, each first resource comprising information;
  - a second web application module comprising a second plurality of resources, each second resource comprising information;
  - means for identifying each first resource which is related to a corresponding second resource;
  - means for identifying each first resource which is independent of all of the second resources; and
  - means for merging each set of corresponding related resources.
11. The web application development tool of claim 10, wherein the means for merging a set of related resources comprises means for determining if information in a

resource in the first module conflicts with information in the corresponding resource in the second module.

12. The web application development tool of claim 11, wherein, if information in a resource in the first module does not conflict with information in the corresponding resource in the second module, the means for merging the resources comprises:

merging the information of the resource in the second module with the information of the corresponding resource in the first module to create a merged resource; and

packaging the merged resource into a web application file.

13. The web application development tool of claim 12, further comprising means for packaging the independent resources into the web application file.

14. The web application development tool of claim 13, wherein, if information in a resource in the first module conflicts with information in the corresponding resource in the second module, the means for merging the resources comprises means for indicating to a user of the duplication.

15. The web application development tool of claim 11, wherein, if information in a resource in the first module conflicts with information in the corresponding resource in the second module, the means for merging the resources comprises means for aborting the merging of resources.

16. The web application development tool of claim 11, wherein, if information in a resource in the first module conflicts with information in the corresponding resource in the second module, the means for merging the resources comprises:

means for removing the information in the resource of the first module;  
and

means for continuing merging the resources.

17. The web application development tool of claim 10, wherein the first and second modules are WAR files.

18. The web application development tool of claim 17, wherein the web application file is a J2EE archive file.

19. A computer program product of a computer readable medium usable with a programmable computer, the computer program product having computer-readable code embodied therein for packaging a web application, the computer-readable code comprising instructions for:

receiving a first web application module and a second web application module, the first and seconds modules each comprising a plurality of resources, each resource comprising information;

identifying:

those resources of the first module which are related to a corresponding resource in the second module; and

those resources of the first module which are independent of resources in the second module; and

merging each set of corresponding related resources.

20. The computer program product of claim 19, wherein the instructions for merging a set of related resources comprises instructions for determining if information in a resource in the first module conflicts with information in the corresponding resource in the second module.

21. The computer program product of claim 20, wherein, if information in a resource in the first module does not conflict with information in the corresponding resource in the second module, the instructions for merging the resources comprise instructions for:

merging the information of the resource in the second module with the information of the corresponding resource in the first module to create a merged resource; and

packaging the merged resource into a web application file.

22. The computer program product of claim 21, further comprising instructions for packaging the independent resources into the web application file.

23. The computer program product of claim 20, wherein, if information in a resource in the first module conflicts with information in the corresponding resource in the second module, the instructions for merging the resources comprise instructions for indicating to a user of the duplication.

24. The computer program product of claim 20, wherein, if information in a resource in the first module conflicts with information in the corresponding resource in the second module, the instructions for merging the resources comprise instructions for aborting the attempt to merge resources.

25. The computer program product of claim 20, wherein, if information in a resource in the first module conflicts with information in the corresponding resource in the second module, the instructions for merging the resources comprise instructions for:

removing the information in the resource of the first module; and  
continuing merging the resources.

26. The computer program product of claim 19, wherein the first and second modules are WAR files.

27. The computer program product of claim 19, wherein the web application file is a J2EE archive file.